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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/749,980	12/27/2000	Elaine Lee	8600-0010	6822

7590 02/12/2007

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EXAMINER	
REIMERS, ANNETTE R	
ART UNIT	PAPER NUMBER
3733	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/749,980	LEE, ELAINE	
	Examiner	Art Unit	
	Annette R. Reimers	3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,5-11,14-16,19,22-24,31,32 and 34-37* is/are pending in the application.

4a) Of the above claim(s) *5,6,22,31,32 and 34-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7-11,14-16,19,23 and 24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 1 is objected to because the vaso-occlusive member selected from the group consisting of one or more occlusive coils, one or more filters, and combinations thereof is repeated twice in claim 1, at lines 2-3 and 8-9. Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7, 11, 19 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Snyder (US Patent Number 5,658,308).

Snyder discloses a vaso-occlusive coil for treating aneurysms having a thrombogenic/fibinogenic bioactive coating (see figures 1-3 and claims 2 and 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 9, 10, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US Patent Number 5,658,308) in view of Schwarz et al. (US Patent Number 4,414,976) (cited by examiner on 892, paper number 04222004).

Snyder discloses the claimed invention except the thrombus-stabilizing molecule being Factor XIII, plasminogen activator inhibitor or plasmin inhibitor Schwarz teaches that tissue adhesive for use in vascular surgery may be made with Factor XIII, plasminogen activator inhibitor or plasmin inhibitor in order to stimulate wound healing (Column 1 lines 37-44). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder with the thrombus-stabilizing molecule being Factor XIII, plasminogen activator inhibitor or plasmin inhibitor, in view of Schwarz, in order to promote healing.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US Patent Number 5,658,308) in view of Slaikeu et al. (US Patent Number 6,231,590) (cited by examiner on 892, paper number 16)

Snyder discloses the claimed invention except for the member being plasma-treated. Slaikeu teaches that devices are plasma treated in order to attract platelets and thrombogenic proteins to the device (Column 4 lines 57-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder, with a plasma treatment, in view of Slaikeu et al., in order to attract platelets and thrombogenic proteins and thus promote healing at the implantation site.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over unpatentable over Snyder (US Patent Number 5,658,308) in view of Murayama et al. (US Patent Number 5,891,192) (cited by examiner on 892, paper number 3)

Snyder discloses the claimed invention except for the vaso-occlusive member being subjected to ion-implantation. Murayama teaches that ion implantation is used to alter the surface properties, such as thrombogenicity and endothelial cellular migration and adhesion, of the device (Column 3 lines 21-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder with ion-implantation in view of Murayama et al., in order to alter the thrombogenicity and endothelial cellular migration and adhesion.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Snyder (US Patent Number 5,658,308) in view of Nikolchev et al. (US Patent Number 6,526,979) (cited by examiner on 892, paper number 16)

Snyder discloses the claimed invention except for the vaso-occlusive member being microtextured. Nikolchev discloses that an occlusive member is microtextured in order to promote tissue ingrowth and enhance the occlusion of the vessel (Column 14 lines 9-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder with the microtexturing in view of Nikolchev, in order to enhance tissue ingrowth and occlude the vessel.

Response to Arguments

Applicant's arguments filed on November 13, 2006 have been fully considered, but they are not persuasive. Examiner respectfully disagrees with applicant regarding the Snyder reference. As is well known in the art, fibrin is a protein involved in the clotting of blood. It is a fibrillar protein that is polymerised to form a "mesh" that forms a hemostatic plug or clot (in conjunction with platelets) over a wound site. Fibrin is made from its zymogen fibrinogen, a soluble plasma glycoprotein that is synthesized by the liver and fibrinogen is a principal protein of blood clotting. Snyder discloses thrombus-stabilizing molecules, fibrin or combinations thereof as disclosed in claim 1 (see claims 2 and 3 of Snyder).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, regarding Snyder in view of Schwartz, it would be obvious to someone skilled in the art to infer that the thrombus-stabilizing molecule could be Factor XIII-fibrinogen, since Snyder discloses fibrin and since it is well known in the art that Factor XIII or fibrin stabilizing factor is an enzyme of the blood coagulating system that crosslinks fibrin. In addition, Schwartz

does not teach away from Snyder. Schwartz discloses Factor XIII-fibrinogen to promote sufficient coagulation/occlusion (see column 1, lines 37-43).

Regarding Snyder in view of Slaikeu, Snyder in view of Murayama, and Snyder in view of Nikolchev, as stated above, Snyder discloses the claimed invention except for the member being plasma-treated. Slaikeu teaches that devices are plasma treated in order to attract platelets and thrombogenic proteins to the device (Column 4 lines 57-65). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder, with a plasma treatment, in view of Slaikeu et al., in order to attract platelets and thrombogenic proteins and thus promote healing at the implantation site. Snyder discloses the claimed invention except for the vaso-occlusive member being subjected to ion-implantation. Murayama teaches that ion implantation is used to alter the surface properties, such as thrombogenicity and endothelial cellular migration and adhesion, of the device (Column 3 lines 21-29). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder with ion-implantation in view of Murayama et al., in order to alter the thrombogenicity and endothelial cellular migration and adhesion. Snyder discloses the claimed invention except for the vaso-occlusive member being microtextured. Nikolchev discloses that an occlusive member is microtextured in order to promote tissue ingrowth and enhance the occlusion of the vessel (Column 14 lines 9-37). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Snyder with the microtexturing in view of Nikolchev, in order to enhance tissue ingrowth and occlude the vessel.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette R. Reimers whose telephone number is (571) 272-7135. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR

EDUARDO C. ROBERT
SUPERVISORY PATENT EXAMINER